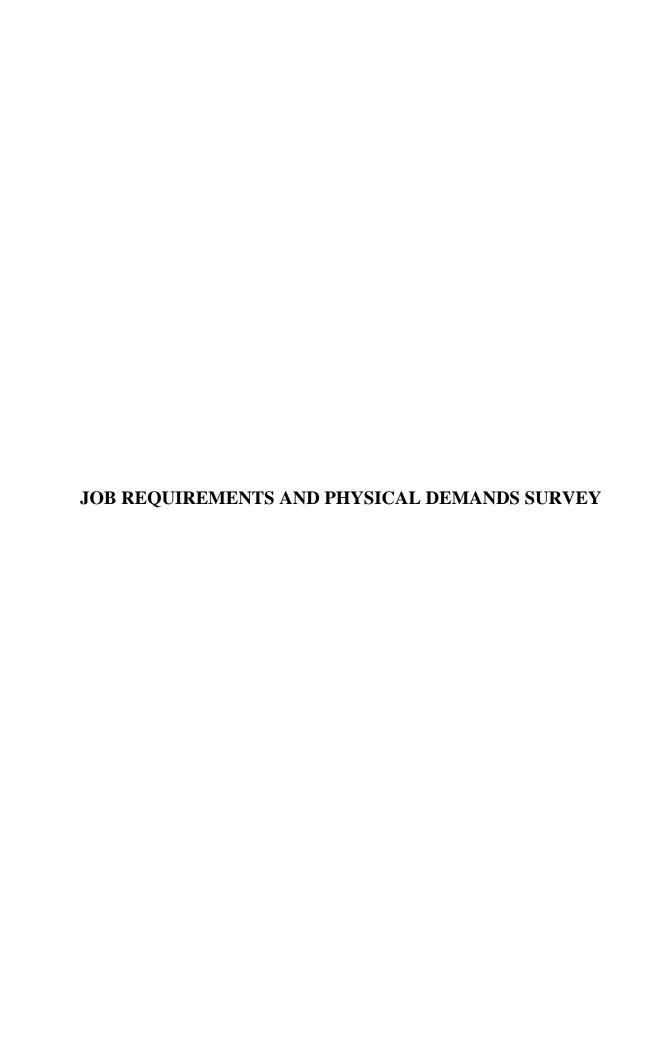
APPENDIX 1

Preparation

APPENDIX 1

This appendix corresponds with Step 1: Preparation. It provides completed examples for:

- a Job Requirements and Physical Demands Survey (JR/PD Survey);
- a JR/PD Survey Summary Report; and
- an AF Form 190.



JRPD SURVEY

A completed survey is provided so that you can see the type of information on which the JRPD Survey Summary Report was compiled. One note of caution: the installation EWG does not make conclusions based on responses on individual surveys. This sample is provided only so that you understand the overall process.

JOB REQUIREMENTS AND PHYSICAL DEMANDS SURVEY

Job Requirements and Physical Demands Survey	Date (YYMMDD) 960516	Workplace Identifier:		
(use this space for mechanical imprint)		Base	AED	Organization
		Patrick Workplace	Arb	45 SUS
		_	e Library	7
		Bldg. No/Location		Room/Area
			722	<i>Li brary</i>
		AFSC/Job Series	001 410	
			GS1410	
Gender: Fema	ale • M	Tale \circ		
Work Group: Civilian	Grade:	_ Military O Ra	nk:	
Age Category: 20 as	nd under O 21-30 O	31-40 ● o	over 40)
Length of service at this base:	less than one year O	more than one year		
Length of time in current shop:	less than one year O	more than one year		
Have you completed this questionn	naire before? Y	res O No •		

Part I - Job Factors

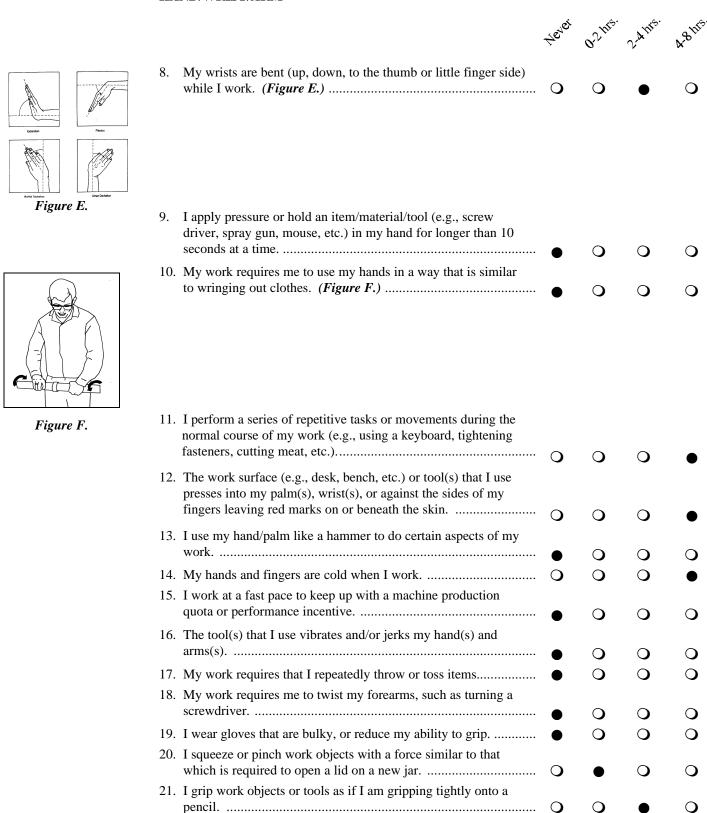
Figure D.

This section enables you to describe what is involved in your job. Indicate how long you do this work on approximately a <u>daily</u> basis.

A. DESCRIPTION OF WORK

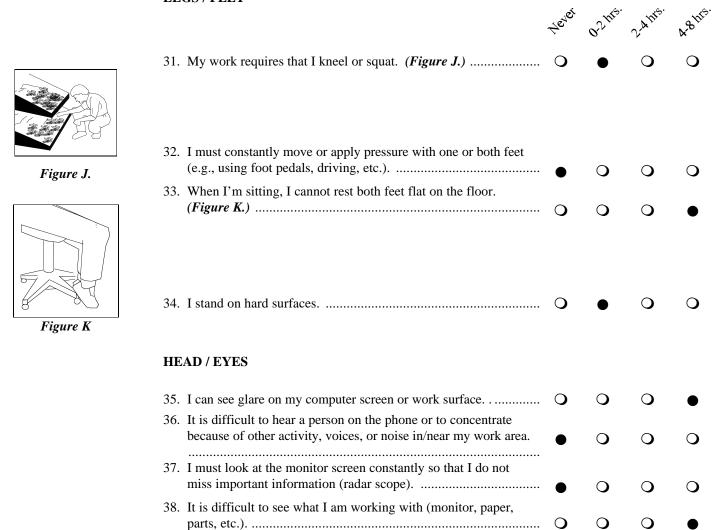
	SI	IOULDER / NECK	Feren	Of his	Z.d. Mrs.	& 8 hr
Chest level	1.	I work with my hands at or above chest level. (Figure A.)	0	•	O	•
Figure A.	2.	To get to or to do my work, I must lay on my back or side and work with my arms up.	•	O	O	O
	3.	I must hold or carry materials (or large stacks of files) during the course of my work.	0	O	•	•
	4.	I force or yank components or work objects in order to complete a task.		\circ	\circ	0
	5.	I reach or hold my arms in front of or behind my body (e.g., using a keyboard, filing, handling parts, performing inspection tasks, pushing or pulling carts, etc.). (<i>Figures B.</i>)	•	0	•	0
Figure B.	6.	My neck is tipped forward or backward when I work. (<i>Figure C.</i>)	•	O	O	•
Figure C.	7.	I cradle a phone or other device between my neck and shoulder. (Figure D.)	O	•	O	O

HAND/WRIST/ARM



	BACK/TORSO	Heyer	Or his.	ZAMS.	×2/1
	22. When I lift, move components, or do other aspects of my work, my hands are lower than my knees. (<i>Figure G.</i>)	•	•	O	0
Figure G.	23. I lean forward continually when I work (e.g., when sitting, when standing, when pushing carts, etc.).	•	O	•	•
	24. The personal protective equipment or clothing that I wear limits or restricts my movement.	•	O	O	0
	25. I repeatedly bend my back (e.g., forward, backward, to the side, or twist) in the course of my work.	0	\circ		\circ
	26. When I lift, my body is twisted and/or I lift quickly. (<i>Figure H</i> .)	•	0	0	0
Figure H.					
	27. I can feel vibration through the surface that I stand on or through my seat.	•	•	•	0
	28. I lift and/or carry items with one hand. (Figure I.)	•	O	O	0
Figure I.	29. I lift or handle bulky items.	O	•	O	0
	30. I lift materials that weigh more than 25 pounds	\mathbf{O}	•	O	0

LEGS / FEET



B. ORGANIZATIONAL FACTORS

		$^{Strongly}D^{isagree}$	D_{isage}	$N_{\mathbf{e}^{t}lt_{\mathbf{a}l}}$	Agree	$S_{trangly}$ Agree
уу		1	2	3	4	5
	39. I often feel unclear on what the scope and responsibilities of my job are	·····•	•	•	O	O
	40. I often feel that I have too heavy of a workload, one that I could not possibly finish during an ordinary workday.	······⊙······	•	O	O	•
	41. I often feel that I will not be able to satisfy the conflicting demands of various people around me	·····•	O	•	C	O
	42. I often find myself unable to get information needed to carry out my job	·····•	· •	•	C	O
	43. I often do not know what my supervisor thinks of me, how he/she evaluates my performance	····•	O	•	•	•
	44. I often think that the amount of work I have to do interferes with how well it's done.	····••	· •	•	O	O

C. PHYSICAL EFFORT

45. How would you describe the physical effort required of your job?

6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
No exertion	Extremely		Very		Light		Somewha		Hard		Very		Extremely	Maximal
at all	light		light				t hard				hard		hard	exertion
\mathbf{O}	\mathbf{O}	\mathbf{O}	\mathbf{O}	\mathbf{O}		\mathbf{O}								

Part II - Your Body's Response to Work Demands

D. DISCOMFORT FACTORS

This section enables you to identify how your body responds to the demands of *your job*. In each section, answer the first question. If the answer is "no" go to the next column.

<u>Question</u>	Shoulder/Neck	Hands/Wrists/Arms	Back/Torso	Legs/Feet	<u>Head/Eyes</u>
• In the past 12 months, have you experienced <u>any</u> discomfort, fatigue, numbness, or pain that <i>relates to your job</i> ?	46. Yes O No ● If "no", go to question 49	49. Yes ● No O If "no", go to question 52	52. Yes ● No O If "no", go to question 55	55. Yes ● No ○ If "no", go to question 58	58. Yes ○ No ● If "no", go to question 61
How often do you experience discomfort, fatigue, numbness, or pain in this region of the body?	47. Daily O Weekly O Monthly O	50. Daily O Weekly Monthly O	53. Daily O Weekly O Monthly	56. Daily O Weekly O Monthly O	59. Daily O Weekly O Monthly O
• On average, how severe is the discomfort, fatigue, numbness, or pain in this region of the body?	48. Mild O Moderate O Severe O	51. Mild Moderate Severe O	54. Mild Moderate Severe	57. Mild O Moderate O Severe O	60. Mild O Moderate O Severe O

Part II - Your Body's Response to Work Demands (continued)

E. GENERAL QUESTIONS

61.	51. In the past 12 months, have you seen a health care provider for any pain or discomfort that you think relates to your job ?					
62.	Do you experience any work-related p the weekend?	oain or discomfort that does no	ot improve when you are away fro	om work overnight or over	Yes O No ●	
63.	In the past 12 months, has any work-rhobby, leisure, etc.)?	elated pain or discomfort cau	used you difficulty in carrying out	normal activities (e.g., job,	Yes ● No O	
64.	Has a health care provider ever told yo work?	ou that you have any of the fo	ollowing conditions which you this	nk might be related to your	Yes O No ●	
	Tendonitis/TenosynovitisEpicondylitis (Tennis Elbow)Thoracic Outlet Syndrome	Ganglion CystBursitisBack Strain	Trigger FingerCarpal Tunnel SyndromeKnee or Ankle Strain	Overuse Syndrome		
65.	Do you have or have you ever had one	e or more of the following cor	nditions?		Yes O No ●	
	Wrist FractureThyroid Disorder	Rheumatoid ArthritisHypertension	DiabetesKidney Disorders	• Gout		

Part III - Work Content

The section below will enable you to describe the content of the work that you do in your current shop.

Fill in the box that describes how frequently you do the task listed, based on the following definitions:

- Routine: Performed on three or more days per week.
- Non-routine: Performed two days a week or less.
- Seasonal: Performed only during certain times of the year
- Never/NA: You do not perform this type of work.

<u>No.</u>	Type of Work		Work Freq (Check o		
		<u>Routine</u>	Non-Routine	Seasonal	Never/NA
66.	abrading	•	•	•	•
67.	baking	O	O	\mathbf{O}	•
68.	bolting/screwing	•	•	•	•
69.	calling (telephone use)	•	•	O	•
70.	chipping	•	•	•	•
71.	cleaning by hand	•	•	•	•
72.	cleaning with high pressure equipment	0	0	0	•
73.	coating/immersing	O	0	O	•
74.	cooking	0	0	O	•
75.	copying 	0	•	0	•
76.	crimping	0	O	O	•
77.	cutting/shearing	0	O	O	•
78.	drafting/CAD system use	0	0	0	•
79.	drilling	0	0	0	
80.	driving (vehicles)	0	0	0	•
81.	excavating	0	0	O	•
82.	filing/general administrative	0	•	O	0
83.	flame cutting/arc cutting	0	O	0	
84.	folding/fitting	0	O	O	
85.	gluing/laminating				•
86.	grinding/buffing/polishing	0	O	O	•
87.	hammering	0	O	O	
88.	lifting		•))	O
89. 90.	loading (pallets, trucks, carts, aircraft) lubricating	\circ	9	0	•
90.	iuoricating		•	•	•

Part III - Work Content (Continued)

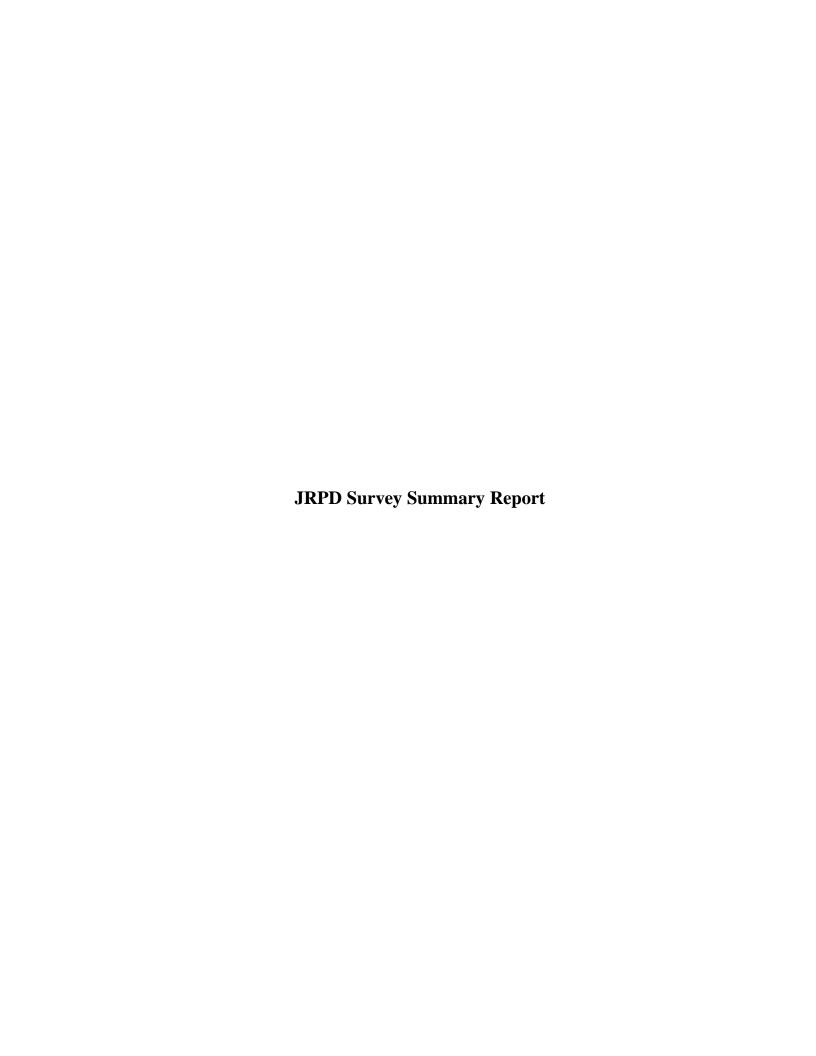
No.	Type of Work	Work Frequency				
			(Check o			
		<u>Routine</u>	Non-Routine	<u>Seasonal</u>	Never/NA	
91.	machining	•	O	\mathbf{O}	•	
92.	masoning	•	O	\mathbf{O}	•	
93.	melting	O	O	\mathbf{O}	•	
94.	molding	0	O	\mathbf{O}	•	
95.	monitoring (visual displays)	•	•	O	O	
96.	mousing (for computer work)	•	O	O	O	
97.	nailing	O	•	•	•	
98.	opening/closing heavy doors	O	O	•	•	
99.	packing/packaging	O	0	•	•	
100.	painting/spray painting	0	O	O	•	
101.	paving	O	O	O	•	
102.	pumping (by hand)	•	•	•	•	
103.	riveting/bucking	•	O	\mathbf{O}	•	
104.	sanding	•	O	\mathbf{O}	•	
105.	sawing	•	•	•	•	
106.	scanning (using bar code readers)	•	O	O	•	
107.	sewing	0	O	O	•	
108.	soldering/brazing	0	0	O	•	
109.	stapling	O	•	•	•	
110.	stripping/depainting by hand	O	O	•	•	
111.	stripping/depainting mechanically	0	0	0	•	
112.	transporting loads on non-powered carts	•	•	\mathbf{O}	O	
113.	turning valves	O .	•	•	•	
114.	tying/twisting/wrapping	O .	O	•	•	
115.	typing/keying	•	0	0	O	
116.	welding	•	•	O	•	
117.	wheeling loads	•	•	O	•	
118.	wiring	O	O	•	•	
119.	wrenching/ratcheting	0	O	•	•	
120.	writing/illustrating	•	0	O	O	
121.	(Write in others)	•	\circ	O	•	
121. 122.			0	9	0	
			_	_	_	
		I				

Part IV - Process Improvement Opportunities

Think about your job as a whole, including routine, non-routine or seasonal work.

Read the questions listed below and **describe the activities** that you or your co-workers think place the greatest demands on your body.

1.	Which tasks are the most awkward or require you to work in the most uncomfortable positions?
My	workstation is uncomfortable. I do a lot of work using the mouse.
2.	Which tasks take the most effort?
As	my chair has aged, it has become harder to adjust.
3.	Are there any tools or pieces of equipment that are notoriously hard to work with? (If so, list them below)
4.	If you could make any suggestions that would help you do your job more easily or faster or better, what would you suggest?



JRPD Survey Summary Report

You will need to refer to this report in cases when you are conducting pro-active problem-solving in EPRA-designated shops. Table A describes parts of the report that may be particularly helpful.

Table A

JRPD Survey Summary Report - Items to Include in Pre-Shop Visit Review

Where	Selected Items/Information	What it Tells You
Page 1	Steps 1, 2, and 3. Items A.1-A.5 and D.1-D.5 are combined using the Ranking Matrix to generate the Priority Rank for the shop. The highest score for any body region (e.g., shoulder/neck, back/torso, etc.) is used as the Priority Rank on which the EWG makes its initial judgment about EPRA status.	Look at the highest body part ratings for the shop as a whole. If the shoulder/neck, for example, gets the highest ratings, you may wish to pay special attention to risk factors/demands on the shoulder as you perform assessments in the shop. Also, if your Level I Checklist results generate a high relative score for the same region, you might conclude that the job/task which is the focus of your assessment, may be contributing to reported shoulder/neck problems throughout the shop.
Page 2	Steps 4 and 5. The Organizational Rating indicates the perceived level of "job stress" in the shop. The Physical Effect Factors score indicates people's overall perception of physical demands (e.g., easy, hard, etc.)	A "high" Organizational Rating could indicate that high levels of job stress (e.g., poor relationship with supervisor, high work load, etc.) throughout the shop may be increasing people's experience with pain and discomfort. While you are not necessarily responsible for dealing with job stress, employees may comment about it during the course of your assessment. A Physical Effect Factors score of 15 or higher indicates that employee's think the over job demands in the shop are "high" (15 = hard on the survey). You should be sensitive to this as you are performing the assessment.

Table A (Cont'd)
JRPD Survey Summary Report - Items to Include in Pre-Shop Visit Review

Where	Selected Items/Information	What it Tells You
Page 2	Step 6. Health care provider score.	Health care provider score indicates number of employees who have received prior medical attention for a disorder.
	Activity Interruption percentage.	Activity Interruption percentage indicates the percentage of employees whose work or home activities have been affected by work-related pain or discomfort.
Page 2	Step 7. List of routine types of work.	This information is particularly important. This is the list of tasks that you will verify with the shop supervisor and from which you may select jobs to include in your proactive assessment.
Page 3	Step 8. Information on "potential concerns" and "improvement opportunities" within the shop.	Information in Step 8 may help you fine tune or prioritize the list of jobs you wish to include in your assessment. Pay close attention to the improvement opportunity remarks. Employees are providing you with some time-saving insight into what may help reduce ergonomics risk factors or pain/discomfort throughout the shop.

Page 1

ERPA Status:	Priority Ranking:	Date:	
Date:	Workplace Identifier:	Base:	
16 May 1996		Patrick AFB	
Organization:	Workplace:	Bldg./Location:	
45 SUS	Base Library	722	
Room/Area	AFSC:	Civilian Job Series:	
Library	N/A	GS1410	
Shop Supervisor: K Kessler	Duty Phone: X 6881	Office Symbol: SVRL	

Step 1	Step 2	Step 3	
Write in the Risk Factor Rating	Write in the Discomfort Rating for	Look at the "Ranking Matrix" below	
for Part I, (questions 1-38, Scoring	Part II, (questions 46-60, Scoring	and enter the Priority Score in it's	
Sheet pg.1)	Sheet pg.3)	corresponding box.	
A.1 High	D.1 <i>Medium</i>	Shoulder/Neck = 7	
A.2 <i>Low</i>	D.2 Medium	Hands/Wrist/Arms = 3	
A.3 M-dium	D.3 M-di um	Back/Torso = 5	
A.4 <i>Low</i>	D.4 High	Legs/Feet = 6	
A.5 <i>Low</i>	D.5 High	Head/Eye = 6	

	Ranking Matrix for Priority Score	Discomfort High	Discomfort Medium	Discomfort Low
Ranking				
Matrix	Risk Factor High	9	7	4
	Risk Factor Medium	8	5	2
	Risk Factor Low	6	3	1

Select the HIGHEST score for any body part from Step 3 and enter \rightarrow

Survey
Priority
Rank:

Page 2

Step 4	_			
B. Enter Organizational Rating: (Questions 39-44, Scoring Sheet pg. 2)	Comments: None			
Step 5				
C. Enter Physical Effect Factor Score: (Question 45, Scoring Sheet pg.2)	Comments: None			
Step 6				
E. Enter the score for each of the Gener	ral Questions: (Questions 61-65, Scoring Sheet pg. 4)			
E.1 Health Care Provider Score	Comments: Three employees have sought nedical treatment during the last year.			
E.2 Recovery Time Score	Comments:			
<u>17</u> %				
E.3 Activity Interruption Score	Comments: 1/3 of employees report that work-related			
33 %	pain/disconfort has affected job performance/hobbies.			
E.4 Previous Diagnosis Score	Comments:			
50 %				
E.5 Contributing Factors Score	Comments: 1/2 of employees have been diagnosed with a			
%	condition that could cause them to report pain/disconfort.			
Step 7				
F. List below each of the routine types of work which had shop percentage scores over 20%. (Items 66-122, scoring sheet page 5)				
Type of Work	% Type of Work %			
<u>Calling</u>	30_			
Lifting				
Monitoring	66			
Mousing				
Typi ng/Keyi ng				

Step 8	
Review Part IV (Questions 1-3) to identify tasks, tools, equipment, etc., that employees listed as potential concerns. Comment as appropriate.	Comments: Constant use of nouse
Review Part IV (Question 4) to identify potential improvement opportunities. Comment as appropriate.	Comments: No improvement suggestions notes
Step 9 Injury/Illness Data: Review the injury/illness history from this shop. Attach information and comment as appropriate.	Comments: One employee has had surgery on both wrists (Carpal Tunnel Syndrone)

Shop Status Recommendations for follow-up: Refer to Bioenvironmental Engineering for Level I Assessment. Suggest beginning by investigating the type of tasks performed by the employee who has had surgery. Issues may be common to other employees or workstations. See also list of "routine" work from Step 7 (e.g., lifting, computer tasks)



AF Form 190

Attached is a completed AF Form 190. Table B describes parts of the report that may be particularly helpful.

Table B
AF Form 190 - Items to Include in Pre-Shop Visit Review

Selected Items/Information	What it Tells You
Items 6 and 10. Work Location and Occupation (Job Title/AFSC)	This information may help you pin point the possible job or workstation source of reported potential ergonomics problems.
Item 25. Describe Job Tasks that Resulted in Exposure to Hazardous Materials/Agents (Specify the material/agent).	The more specific the information, the more helpful it will be to prepare for your assessment. If item 25 identifies, "clerical duties, administrative duties," you will still need to collect a detailed "task breakdown from the employee." At the very least, however, you know that the Case Study Problem-Solving Matrices for Administrative Work Areas will provide information that you use in problem-solving.
Item 12. Diagnosis and Relevant Medical Data.	This description will help you focus your assessment. In other words, while you will be completing the Level I Ergonomics Assessment Checklist in order to assess exposure for all of the body regions, knowing in advance that the person is suffering from an elbow disorder may make you more sensitive to risk factors for that body region.
Step 31. Bioenvironmental Survey.	One of the primary purposes of the Level I Ergonomics Assessment and Problem-Solving Guide for Administrative Work Areas is to provide you with the tools to supplement your own ergonomics expertise and enable you to complete this section.

OCCUPATIONAL ILLNESS / INJURY REPURT (THIS FORM IS SUBJECT TO THE PRIVACY ACT OF 1974 - Use Blanket PAS - DD Form 2005)					
I. PATIENT IDENTIFICATION					
1. NAME (Last, First, MI)		2. SSAN			
	· · · · · · · · · · · · · · · · · · ·		☐ MIL ⊠ CIV ☐	M ⊠ F 41	
6. WORK LOCATION	7. DUTY PHONE	ŧ	ATION AND SYMBOL 9. INSTALLATION	1	
Elect Surv Ctr, Bldg 1840	554-6541	ESC/SRSV		0	
10. OCCUPATION (Job Title/AFSC) Computer Assistant	5	ا	11. SUPERVISOR (Name and Duty Phone)		
II.	···	NCIDENT / II	LLNESS DATA		
12. DATE AND TIME OF			13. STATUS AT TIME OF EXPOSURE		
EXPOSURE: ILL	NESS: Oct94			TDY OTHER	
14. DURATION OF EXPOSURE			15. WITNESS (Name and Phone)		
Oct 94 - Prersent (10 mc	 		Ms.		
16. DESCRIPTION OF SYMPTOMS AT ONSET			2 1 101 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 1	
in both thumbs.	d and slight num	oness of fing	gertips in left hand. Problems holding onto it	ems. Occasional pai	
III.		MEDICA	AL DATA		
17. DIAGNOSIS AND RELEVANT MEDICAL I	DATA (Indicate		18. CLASSIFICATION ²	OSHA CODE	
affected body parts)			OCCUPATIONAL SKIN DISEASE	21	
2 May 95 Mild right carpal tunnel s	syndrome		DUST DISEASE OF LUNGS	22	
3<4.0			RESPIRATORY CONDITION DUE TO TOXIC AGEN	T 23	
			SYSTEMATIC EFFECT OF TOXIC MATERIAL (pois	oning) 24	
		F	DISORDER DUE TO PHYSICAL AGENT		
			(Other than toxic material)	25	
			DISORDER DUE TO REPEATED TRAUMA (Exclude hearing loss)	2 4	
FATALITY RESULTED I	N UNCONSCIOUSNES	SS	OTHER OCCUPATIONAL DISEASE	2.0	
19. DATE/TIME OF INITIAL TREATMENT/DIA	GNOSIS		20. MEDICAL FACILITY	<u> </u>	
2 May 9.5			1625 Medical Center Point, Suite 212		
21. TREATMENT ADMINISTERED (Check One	c i FIRST	AID 1	DEFINITIVE CARE(Specify In Remarks)		
22.		ISPOSITION OF			
X RETURN TO NORMAL DUTY			NO. OF DAYS		
X REFURN TO NORMAL DUTY X REFER TO PRIVATE PHYSICIAN			ADMITTED TO HOSPITAL 2		
X EXCUSED FOR REST OF DUTY OF	DAY		PLACED ON QUARTERS 2 RETURN TO LIMITED DUTY 2		
23. NAME OF MEDICAL OFFICER Dr.			NETOKIA TO EIMITED DOTT		
24. REMARKS Numbness in hands and	problems holding	onto items	began in October 1994.		
			· ·		
2 May 95 - Dr. plcscribed us	se of a splint at n	ighi.			
IV		ENI/IDONA	ENTAL DATA		
IV. ENVIRONMENTAL DATA					
25. DESCRIBE JOB TASKS THAT RESULTED IN EXPOSURE TO HAZARDOUS MATERIALS I AGENTS <i>Ispecity:he marerral,'apenr/</i> Patient was performing w&id processing/data eA=hcn she felt numbness in fingertips and pain in thumbs.					
Tanton was performing word processing data of 1—11011 she for numerices in importupe and pain in diames.					
V. CASE CLASSIFICATION					
26. OCCUPATIONAL INCIDENT YES NO	27. TYPE INJURY		28. WORKPLACE SS IDENTIFIER	144	
29. REVIEWING OFFICER			, Capt 43H3	30. DATE IYYMMD 950821	
 One-time treatment of minor scratches, cuts, burns, and splinters which do not require professional care. See AFR 127.i2. 					
AF FORM 400 . OOT 04 /FF 1/4/					